

## **WQB "Wide Aperture Quad" for Main Injector**

2 February 2006, 9:00 AM

IB2 conference room

Attendees: Rich Andrews, Weiren Chou, Dave Harding, Bill Robotham, Mike Tartaglia

### **Measurements**

Mike presented the production measurements on the first seven magnets. The strengths and harmonics are very tightly clustered, so the magnets can be regarded as interchangeable. Mike has tabulated the raw sequence numbers for the production measurements so that Bruce can flag the data in Sybase appropriately.

The use of inconsistent ramps prevents a meaningful comparison of the trim measurements at different main coil currents and different trim polarities. Once the power supply is free, probably next week, the measurements will be done with a consistent approach on WQB003.

On six out of seven magnets the magnetic and mechanical centers agreed within a few thousandths of an inch, within the typical surveying errors. There were clearly gross inconsistencies in the reported numbers for the seventh magnet (WQB003). While using the mechanical center for alignment in the tunnel is clearly appropriate, there is plenty of time to get a consistent magnetic center measurement, so that is being done.

### **Fabrication**

There are three magnets at MI-60 ready for installation.

There are three magnets at IB2 within a day or so of being ready for installation

There is one magnet at IB1 for repeat magnetic centering measurements.

-WQB008 All coils potted. All cores stacked. Magnet being assembled.

-WQB009 All coils wrapped. Second core being stacked.

### **Schedule**

The three magnets in IB2 should ship within a few days. Work on the spares will proceed, with an uncertain completion date.

New installation tooling was needed to support the magnet during transport in the tunnel. That has now been demonstrated to work. After many revisions the installation procedure has been approved taking into account ALARA considerations.

One spare will stay at MI60 and the other at TPL.

### **Technical Report**

Dave has circulated a draft table of contents and author list and revised it in response to comments. He will set targets for writing the sections.

**The next meeting was not scheduled.**